

N.E.W.S. LETTER



The Publication of the North East Weak Signal Group

MAY 2001 VOLUME NINE ISSUE THREE

President: W1GHZ Paul Wade V P: WA1MBA, Thomas Williams

CURRENT OFFICERS

Secretary: N1GJ George Jones Treasurer: N1DPM Fred Stefanik

NEXT MEETING

THE NEXT MEETING IS ON SATURDAY MAY 19 TH, 10:00 AM AT WESTOVER AIR FORCE BASE

WE WILL HAVE A TOUR OF WESTOVER AFB AND THE C5A ROVER SEE DRIVING INSTRUCTIONS ON PAGE 4

IN THIS ISSUE

FROM THE PRESIDENT DE W1GHZ	PAGE 2
SEC. REPORT OF NEWS BOARD MEETING 17 MAR 2001 DE N1GJ	PAGE 2
SEC. REPORT OF NEWS MEETING 17 MAR 2001 DE N1GJ	PAGE 3
EASTERN VHF/UHF CONFERENCE DE N2LIV	PAGE 3
N.E.W.S. MEETING AT WESTOVER AIR FORCE BASE DE W1TDS	PAGE 4
DOMAIN NAME FOR N.E.W.S. DE WA1MBA	PAGE 4
2001 MILLENNIAL CUMULATIVE MICROWAVE CONTEST DE W1GHZ	PAGE 5, 6
FOR SALE OR SWAP	PAGE 6, 7

DON'T FORGET

THE NORTH EAST WEAK SIGNAL GROUP

2 METER VHF AND ABOVE NET

EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL 144.250

W1COT, K1UHF OR K1PXE NET CONTROL

MEMBERSHIP in the N.E.W.S. Group is \$10 per year. Apply to Fred Stefanik, N1DPM, 50 Witheridge St., Feeding Hills, MA 01030 (413) 786-7943 You may download an application from our web page http://uhavax.hartford.edu/~newsvhf

The N.E.W.S. LETTER is the publication of the North East Weak Signal Group. Articles may be reprinted with proper credit given to the author and the N.E.W.S. LETTER. Articles can be sent to K1UHF, Del Schier, 126 Old West Mountain Road, Ridgefield, CT 06877 Preferably only via e-mail with "NEWSletter" in the subject line, to K1UHF@amsat.org

FROM THE PRESIDENT

May meeting

Well, the snow is almost gone in New England - W1AIM and I were cross-country skiing near his house on Patriot's day, April 16th, and it looks like it may be gone before Memorial Day! However, further south, it will be safe to attend the next N.E.W.S. meeting on May 19th and help make it a success. The meeting will be at Westover Air Force Base (see driving instructions page 4) and we will have a tour of some interesting stuff. You can even plan how to use a C5A as a rover vehicle when they show up in surplus.

Propagation!

We've actually had some interesting VHF propagation lately, with some good aurora plus some 6-meter openings that all the retired guys tell me about. Conditions for the spring Sprints were OK, with good activity on 222 last night and 2 meters last week. Post your results on the NEWS reflector and send in your scores (see April QST for sponsor).

Millenial Cumulative Microwave Contest Results

The contest committee has finished tabulating the results and the beer. The official results are:

First place	ND3F	379,860 points
Second	AF1T	295,807
Third	K2AXX	2,012
Fourth	WZ1V	1,264

The gaudy trophy for first place and plaques for second through fourth places will be presented at the North East VHF/UHF contest. The fifth place plaque went unclaimed -don't you wish you'd submitted your entry?

Well, you'll get another chance, in the real millenium year, 2001. NEWS will be sponsoring the contest again. To help with the scoring (yes, I never got around to it either) we will be developing software that will process your Cabrillo-format logs and extract the qualifying microwave contacts for you.

Details and entry form available online at www.w1ghz.cx and on the NEWS web page, or send an S.A.S.E. to the club secretary.

Deerchester hamfest

The Hosstraders hamfest has moved again, to Hopkinton, NH (directions below) on May 4th and 5th. Since our former president, KB1VC, is getting married the following weekend, we're planning a little sendoff at the hamfest. Look for the blue pickup truck with W1GHZ license plates somewhere near Holzman Electronics. I understand the bride(?) and groom are registered at ESS.

From the south, drive up I-95 to I-89 to exit 7. Ignore all other exits, regardless of the signs saying Hopkinton. At exit 7, go

right at the bottom, then 100 yards and right again onto Kearsarge Avenue. The B Gate is about a mile and a half on your left. The village is less than a mile beyond the Fairgrounds.

Summer meeting

We have confirmed the Knights of Columbus pavilion for the July meeting, July 21. Thanks to Tom, W1NWE. We had a great time there last year.

Paul W1GHZ

SECRETARY'S REPORT OF THE NEWS BOARD MEETING 17 MARCH 2001

President Paul Wade, W1GHZ, called the News Board Meeting to order at 11:35 AM. The following Board members were present-Paul, W1GHZ, Fred, N1DPM, Art, W1TDS, Mark, K1MAP, Tom, WA1MBA, Del, K1UHF and George N1GJ. Other NEWS members also sat in.

Art, W1TDS, reported that the NEWS Group was ok to hold the May meeting at Westover AFB on 19 May. To make it official, he requested that Paul send a letter to Westover AFB requesting the meeting. Paul agreed.

A date for the November meeting was discussed. It was agreed that we would meet on 3 November.

The weekend of Horse Traders (Friday evening) is unofficially designated as the time for a little wedding send-off party for Matt, KB1VC. If you are at Horse Traders that evening, look for the gang.

The Cumulative Microwave Contest for the year 2000 is now over and a suitable trophy is being prepared for presentation to the winner. Paul, W1GHZ, will present the trophy at the 2001 Conference. The Board agreed that NEWS should sponsor a contest every year. The matter will be brought before the full Club.

Ron, WZ1V reported that the NEWS Group did about 1.25 Million points in the ARRL January VHF Contest. For details see the Pack Rats web page.

Some NEWS members (and others) want to know how to get in touch with the NEWS Group. We have to get our web page registered and hosted. We have to bring back a name for our web site. Tom, WA1MBA, will look into domain names. Ron, WZ1V may continue as web-master.

The meeting was adjourned at 11:50 AM.

SECRETARY'S REPORT OF THE NEWS MEETING OF 17 MARCH 2001.

The general meeting of the NEWS Group was called to order by President Paul Wade, W1GHZ, at 1:06 PM. Members introduced themselves and signed in.

Stan, WA1ECF, reported that he is now a checker of cards for VUCC and would be happy to do the checking at furure NEWS meetings. Contact Stan for details.

Paul, W1GHZ, passed around a new 10 GHz feed that he has been evaluating. More info will be coming later.

Ron, WZ1V, reported that the NEWS Group did well in the January 2001 ARRL VHF Contest. We generated about 1.25 Million points, down somewhat from 2000. This was due mainly to fewer entries from NEWS members. Everyone should think 2002!

A general announcement was made concerning the get together of all those folks who want to send Matt, KB1VC, off to wedded bliss on Friday evening at Horse Traders. Anyone who is around that evening is welcome to join the group.

The next NEWS meeting will be held at Westover AFB, MA. on 19 May. Art, W1TDS, will report final info on time and place in the next NEWS Letter. We expect to have some sort of lunch and a tour of a C5-A aircraft.

Bruce, N2LIV, reported that the Hotel will not be available for the 24-26 August Conference this year. We may have to movethe date to 31 August,1,2 September. (The 2002 Conference will be held in October in conjunction with Microwave Update.) The committee will have to evaluate the effect of the Labor Day weekend on expected attendance. Stan, KA1ZE, will look into the Quality Inn in Vernon, CT, as a possible alternative. The final decision will be made before the next NEWS meeting.

Speaking of the joint conference in 2002, 100-200 people are expected to attend. A meeting place in the Worcester to Springfield area will be selected, to keep costs down.

It was announced that the final NEWS meeting of the year (2001) will be held on 3 November. NEWS will again have a Cumulative Microwave Contest for 2001. Moved and seconded that the NEWS Group again sponsor a Cumulative Microwave Contest for 2001. The group voted approval. Paul, W1GHZ, will award the trophy to the 2000 contest winner at the 2001NEWS conference.

It was reported that there is a problem with the plan to mount a 10 GHz beacon on Mt. Graylock. The necessary equipment cannot fit into the 4 inch cylinder available. Eric, KA1NUN, will work on a solution.

Bert, N2YYU, talked about the new Yaesu FT-817. You can get the output down to 60 milliwatts. He may put together an article for a future issue of the NEWS Letter.

Paul, W1GHZ, talked about the 10/2 transverter he presented at the last meeting. He still has no good source for oscillators. His new project is a 24 GHz transverter. He has a source of 125 MHz oscillators, which would operate at 3.3 VDC.

A general announcement was made concerning the need for people to work on the Hartford Science Fair. The Fair is in March so things need to turn around fast.

If anyone is looking for Books covering the 2000 Microwave Update Conference, see Steve Costro, N2CEI. He has copies available.

A short break was held, starting at 1:39 PM.

After the break, Steve, K1TO, gave a talk on low noise receiving systems. The talk was well done and everyone learned something new. Thanks to Steve for his effort. As a bonus, he also presented a short talk on the Kenwood TS-879 and TS-2000. He likes them for use in his VHF/UHF/Microwave station

The meeting was adjourned at 3:30 PM.

EASTERN VHF/UHF CONFERENCE

Due to unforeseen circumstances with Hotel reservations this years conference will have to be moved from August 24, 25 & 26 to August 31, September 1 & 2. We hope that this will not cause any problems for anyone. With the Holiday weekend and an extra day off maybe more people will be able to attend. We are in the process of finalizing the speakers and proceedings. Anyone wishing to present a paper either in person or for the proceedings should please contact the author. The conference will be held in the same location as last year, the Radisson Hotel in Enfield, CT. Further info will be forthcoming and available on the NEWS Web site as it develops. Please mark your calender with this date.

Thanks & 73's Bruce N2LIV

DONT FORGET

THE NORTH EAST WEAK SIGNAL GROUP

2 METER VHF AND ABOVE NET

EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL

144.250

W1COT, K1UHF OR K1PXE NET CONTROL

CLUB COMPETITION ELIGIBILITY

Here's the list that's going to the ARRL for the club competition station eligibility. This was compiled by George N1GJ from the meeting sign in rosters and cross checked against the membership list to see that the memberships were in good standing. This also included the VHF conference registration list as that does count as one of our meetings. The total count of eligible members for club competition is 56. That's only 6 more than needed to break into the unlimited category. Please be sure if you want your contest score to count towards the NEWS club score that you attend at least 2 meetings during the year and SIGN IN. This is the ONLY record we have of attendance. If you don't sign in then you really weren't there!!! Currently we have 127 members in good standing. With 56 being eligible for club competition that's only 44% of the membership. Hopefully we can get this number to increase along with the contest entries.

73

Fred, N1DPM

AF1T	N1LZK
K1CA	N1MUW
K1FO	N1SAG
K1KI	N2LIV

K1LPS N2MSS/N2RDN

K1MAP N2YYU K1NCO NC1I K1PXE W1AIM K1RWK,N1VDW,N1PRF W1ATT W1COT K1TEO K1UHF W1GHZ K1WHS W1NWE K1WVX W10K K2AEP W1RIL K2CBA W1TDS K2MQJ W1TKO K2RIW W1VT / N7IAL

KA1EKR W1ZC KA10J W2GKR KA1SUN WA1ECF KA1ZE WA1HOG KB1VC WA1MBA KJ1K WA2ALV KU2A WA2LTM N1DPM WB1FKF N1EKV WB2VVV N1FZH WW1Z N1GJ WZ1V

NEXT N.E.W.S. MEETING AT WESTOVER AIR FORCE BASE DRIVING INSTRUCTIONS

From Mass Pike:

Exit 5 left turn on to Memorial Drive. Turn right at sign for Westover AFB.

From 91 391:

Left at exit 3 to Westover Drive. Cross over Memorial Drive to Westover AFB

Stop at gate; MP will tell you how to get to conference center. The bus to the plane leaves at 10:30

POC 413 684 3792

Art, W1TDS

DOMAIN NAME FOR N.E.W.S. PICK ONE!

At our March NEWS meeting, we decided to try to find a suitable web name for the club. I looked at a few, and there are literally thousands of URLs with NEWS as prominent pieces of their names. The best ones that I could find are:

northeastweaksignal.com northeastweaksignal.org neweaksignal.com neweaksignal.org news-vhf.com news-vhf.org

Personally, I prefer the "org" suffix because it better fits a club organization. Some prefer the "com" because it is more common - even though it stands for "commercial". We should probably take a vote about this at a meeting soon. If you can't make it to the next meeting, please let someone who is going know what you would prefer and why.

Tom Williams WA1MBA

DON'T FORGET

THE NORTH EAST WEAK SIGNAL GROUP

2 METER VHF AND ABOVE NET

EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL

144.250

W1COT, K1UHF OR K1PXE NET CONTROL

2001 MILLENNIAL CUMULATIVE MICROWAVE CONTEST

FOR THE REAL MILLENIUM SPONSORED BY N.E.W.S.

Purpose – to encourage microwave activity year round.

Goal – to work as many stations in as many grids as possible, and to encourage new microwave operators.

Period – January 1, 2001 to December 31, 2001

The entry form for the 2001 Millennial Cumulative Microwave Contest is now available. Go back through your logs for 2001 and add up all the microwave contacts, then go to the online entry form at:

http://209.6.82.100/~mhr/millenial-form.html

to enter your score. Entries will be accepted until 28 February 2002, so you can spend the cold winter nights going through the logs. The winner will receive a gaudy trophy, and top 10 scores will receive a plaque or certificate.

RUIFS:

- 1.A station may be worked once in each 4-digit grid square (Maidenhead Locater) on each band above 900 MHz from any 4-digit grid square in any calendar month. In subsequent calendar months, station X may again contact station Y in the same 4-digit grid squares as long as at least one of the two stations has moved 10 miles or more from any previous location. For example if W1GHZ logs a contact from FN42 with N1SAI in FN33 in January, then in February, W1GHZ may again log a contact from FN42 to N1SAI in FN33 as long as one or both stations have moved 10 miles or more from the location used in January.
- 2. Either station may move to another 4-digit grid square for additional contacts.
- 3.Exchange is 6-digit grid square, or 4-digit grid square with penalty. If an operator doesn't know what planet he is on, it doesn't count.
- 4.All contacts must be at least one kilometer and between different 6-digit grid squares, with the exception of a station's initial contact on a band, which may be any distance. All modes are permissible.
- 5. Grid circling and other manufactured contacts are prohibited. If it feels like a manufactured contact, don't do it.

6. There is no rule 6.

- 7. Any form of liason is acceptable: lower frequencies, internet, telephone, cell phone, semaphore, or whatever.
- 8. Equipment may only be used for one callsign per calendar month, except for members of immediate family. Thus a spare rig may

be loaned out to different operators, but only one operator per month. (A new vanity or upgraded callsign is the same operator.)

- 9. Cooperation and amateur spirit are encouraged. This ain't a DX contest.
- 10. Any mode that allows exchange of information is permitted, within rules of FCC or other licensing authority.
- 11 Have fun!

SCORING:

- 1.Each contact scores one distance point for each kilometer distance between the 6-digit grid squares, as calculated by the BD program.
- 2.If only 4-digit grid square is exchanged, then distance is calculated to the corner 6-digit square which produce the smallest distance. Same grid square = one point.
- 3.EME contacts use terrestrial distance if grid squares are exchanged, as above. If only TMO reports are exchanged, then the contact is scored as 500 distance points.
- 4.Multiplier: Each unique combination of 4-digit grid squares between which a contact is made is a multiplier of one for each band.

All colors of light count as one band.

5.Band multiplier: the total for each band is multiplied by the square root of the frequency in GHz, calculated to one decimal place.

The on-line scoring form will multiply automatically.

- 6.Bonus points: Each new callsign worked scores 100 bonus points. Working the same station on another band does not earn additional bonus points. If a station changes callsign during the year, each may be counted. (This relieves other stations of keeping track of all the vanity changes.)
- 7.New band bonus: Any contact made on a band where this operator has never ever made a contact before scores an additional 1000 bonus points. This means once in a lifetime for each band.

8. TOTAL SCORE = distance points X grid multipliers X band multipliers, for each band, + bonus points.

Note: We found the scoring to be a bit tedious. Since many of our microwave contacts are made during contests, we will be developing software to read logs in Cabrillo format and extract contacts which qualify for the Cumulative Contest. This will be available later in the year.

LOGS: should be submitted by 28 February 2002 to N.E.W.S., preferably online at http://209.6.82.100/~mhr/millenial-form.html The online form will post interim results to a summary page during the year to encourage activity, so you can see where you stand.

AWARDS: The highest total score in North America will receive a gaudy trophy. If there is a higher score in the rest of the world, a second trophy will be awarded. Second thru fifth place entries will receive a plaque, and sixth thru tenth places will receive a certificate (unless more plaques are sponsored). All entrants will be listed on the internet.

Awards are currently sponsored by:

- 1.Trophies W1GHZ
- 2.Plaque N.E.W.S
- 3.Plaque WA8WZG
- 4. Plaque Down East Microwave
- 5.Plaque North Texas Microwave Society

FOR SALE OR SWAP

Yaesu FT-102, 160 thru 10 meters. This radio has Fox Tango (now IRC) 2.1kHz filters in both the 8.3MHz and 455kHz IF. It also has 300Hz / 270Hz Cw filters in both IFs. Transverter connection is straight forward with phono connectors on the rear panel. Yaesu YD148 desk mike, and FT102 instruction manual included. QST review was in 1983. Rig is a 7cosmetically and a 9.5+ electrically. \$450 or BRO.

Icom IC-761, 160 thru 10 meters with general coverage RX from 100kHz to 30MHz. This radio has the FL-44A 2.4kHz 455IF SSB filter and 500Hz CW filters in both the 9 MHz (FL-32A) and 455kHz (FL-52A) filters. It also has an internal automatic antenna tuner. It is recently back from Icom for a complete "check up and alignment" (9-2000). IC-SM6 desk mic, owners manual, and service manual included. This radio will also easily interface with transverters. QST review was in 1988. Rig is a 9 cosmetically and a 10 electrically. \$1000 or BRO.

I can deliver these to the March NEWS meeting or Dayton.

Reason for sale of both of these is I like my Japan Radio JST-245 so much I want another one! 73 Fred N1DPM, FN32qb

FOR SALE OR SWAP

Four(4) 17B2's @ 190	760
One(1):Directive Systems 4 port power divider	69
Four(4):Phased LMR400 lines	160
by Directive Systems	
4 x 12ft. 2"od .125 wall h-frame	157
Harbach: six 8x10" plates	126
Harbach: 24 2" saddles	120
	1,392

This is what I have in the system, make me a reasonable offer. To be picked up in Southern Pa.

Brian W3EME w3eme@arrl.net (h) 717-227-8175 (w) 800-875-7940 x 9107

Kenwood all mode tranceiver Model TM 255A with DFK-7A Detachable Front Panel Kit (7m) \$600.

2M allmode, 100 watt Icom IC-275H with High Stability oscillator, Icom PS-55 power supply, Instruction and Service Manual, \$750.

HF & 6 Meters, 100 Watt, Icom 736 with Service Manual, \$800

1296 MHz 60 watt PA. Down East Microwave 2370PA \$550.

2 Meter 1500W mast mounted preamp by SSB, never used. \$375.

All items in excellent shape. Price Plus shipping. Looking to purchase a new TS-2000 rig. Bruce N2LIV

Price reduced, desk mic added.

For sale. Icom IC-756 HF+6M transceiver. S/N 2664 Includes International Radio filter #322 1.8kHz. Also includes HM-36 hand mic, SM-8 desk mic, power cord, manual, original factory box. Unit is in great condition.

\$1300 or BRO, double boxed, shipped and insured.

73 Fred N1DPM FN32qb

FOR SALE OR SWAP

I have a small quantity of new Alcoa 6061-T6 aluminum masts, 1.9" OD (1.500 SCH 40), 1/8" wall, 5 ft. length. Lightweight, heavy-duty masts for tower or making UHF+ stacking frame. \$20 ea you ship or will bring some to next NEWS meeting. -73, Ron Klimas WZ1V, wz1v@ntplx.net, 860-589-0528.

222 MHz-8877 and AM-6155 amps. Anyone want big power on 222???

2 X Directive Systems 1376LY's - 2.3 Ghz, 76 elements, 23.4 dbi gain antennas - NEW WITH: Vertical stacking kit, power divider, and phased matched harnesses (by Directive Systems). This is not a kit. The antennas etc. are in an unopened box here at my house. I'll slap another label on it and ship it to you. You pay UPS shipping. \$400.00 Dick K3MQH rgb119@blazenet.net

MIXERS: Watkins Johnson M1E 1-400 MHz, SMA \$10. Watkins Johnson WJ-M1G DBM 1-4 GHz, w/ data sheet \$20. Vari-L DBM 500 1.7-4.2 GHz, w/ data sheet \$20. (9) Magnum Microwave FCCM 59277 drop-in, 10 GHz \$35. Western Microwave M-9957 SMA, 10 GHz \$35. Western Microwave M-9957 SMA, 10 GHz \$35. POWER DIVIDER Weinschell DC-18 GHz, 1W SMA, w/data sheet \$25. HYBIRDSMerrimac QHM 2-33 SMA, 2-4 GHz, 90 degrees \$20. Wiltron 90 degree, 2-4.5 GHz, N conn. \$20. Wiltron 0 degree, 2-4.5 GHz, N conn. \$20. (4) Quad Omni-Spectra 2032-4097-00 10GHz \$25. (2) Quad ARRA 6194-90D 10 GHz \$25. SMA terminations for Quads \$7. CIRCULATORS (2) OMC A61699-1 1.030-1.2 GHz \$20. Teledyne C-4S64T-7 2-4 GHz, SMA w/data sheet \$20. GTE Lenkurt 049-54329 01 5.85-7.2 GHz \$20. Aertech AUF6444 10 GHz, SMA \$25. (6) Teledyne 24022 10 GHz, SMA \$25. Ferrocom 355-0495-050 10.7-11.7 GHz, SMA \$25. All Items Plus shipping. Bruce Wood N2LIV (631) 265-1015

ULTIMATE TVI FILTERS FOR WEAK SIGNAL OPERATORS!

Commercial CATV quality 75 ohm traps tuned to 50.125 and 144.200. These filters are weatherproof and temperature compensated with attenuation at the tuned frequency of >100 dB. Loss across the entire VHF and UHF television spectrum is typically under .5 dB. They have a male F connector on one end and a female on the other. They will solve your fundamental overload problems on the band frequency they are tuned for. They are \$15.50 each plus \$5.00 shipping and handling per order. I will bring them to the meeting so you can save the shipping.

DOWN EAST MICROWAVE

VHF/UHF/SHF EQUIPMENT AND PARTS 50 TO 10,368 MHZ

MICROWAVE LOOP YAGIS, VHF/UHF YAGIS
NO-TUNE LINEAR TRANSVERTERS,
LINEAR POWER AMPLIFIERS
LOW NOISE PREAMPS
COAX RELAYS
COAX CABLE CONNECTORS
CRYSTALS
CHIP COMPONENTS, MMIC'S, TRANSISTORS, RF MODULES



SAY YOU SAW IT IN THE NEWSLETTER

STEVE KOSTRO, N2CEI, 954 RT. 519, FRENCHTOWN, NJ. 08825 PHONE: 908-996-3584, FAX: 908-996-3702 WEB PAGE: http://www.downeastmicrowave.com/

DIRECTIVE SYSTEMS

ANTENNAS AND ACCESSORIES

NOW FEATURING THE K1FO 17' BOOM YAGIS FOR 144, 222, & 432 MHz!

DAVE OLEAN, K1WHS, RR1, BOX 282, LEBANON, ME. 04027, PHONE: 207-658-7758 http://www.directivesystems.com



THE NEXT MEETING

IS ON SATURDAY MAY 19 TH, 10:00 AM AT WESTOVER AIR FORCE BASE

WE WILL HAVE A TOUR OF WESTOVER AFB AND THE C5A ROVER SEE DRIVING INSTRUCTIONS ON PAGE 4

DON'T FORGET YOU NEED TO ATTEND MEETINGS FOR THE CLUB ARRL COMPETITION!!

DONT FORGET

THE NORTH EAST WEAK SIGNAL GROUP

2 METER VHF AND ABOVE NET

EVERY THURSDAY NIGHT AT 8:30 p.m. LOCAL 144.250

W1COT, K1UHF OR K1PXE NET CONTROL

North East Weak Signal Group

c/o N1DPM Fred Stefanik 50 Witheridge St. Feeding Hills, MA 01030



Check your membership expiration date on the mailing label!!